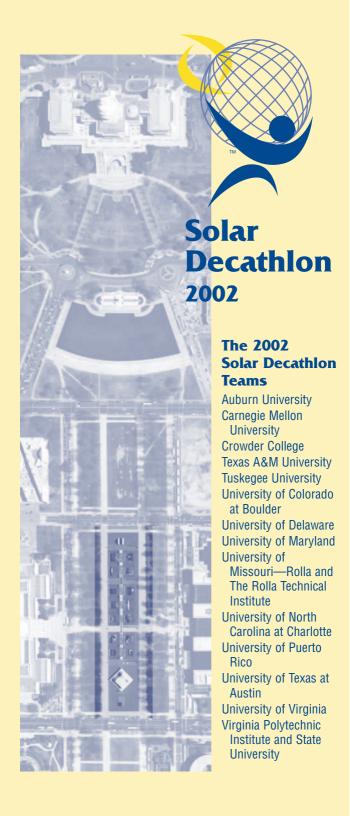


rsity of Colorado at Bould



#### What Is the Solar Decathlon?

The Solar Decathlon is a competition to design, build, and operate the most effective and attractive house powered solely by the sun. The U.S. Department of Energy (DOE) is proud to sponsor the international competition for collegelevel students.

Fourteen student teams from the United States and Puerto Rico will transport their competition homes to the National Mall in Washington, D.C., and will begin building a Solar Village on September 19. When construction is complete on September 26, the Solar Decathlon will begin. During the event, only solar energy may be used to generate the power needed to compete in the 10 Solar Decathlon contests.

#### The Ten Contests

Each team can earn 1,100 points. The Design and Livability contest is worth 200 points; each of the others is worth 100 points.

**Design and Livability:** Have design, innovation, aesthetics, and renewable energy technologies been successfully integrated into a pleasing domestic environment?

**Design Presentation and Simulation:** Do the pre-design drawings, scale models, and computer-generated models effectively illustrate the construction of the house and the simulation of its energy performance?

**Graphics and Communication:** How effective are the Web site, newsletters, and other outreach materials designed by the teams?

The Comfort Zone: Is the house designed to maintain interior comfort through natural ventilation, heating, cooling, and humidity controls while using a minimum amount of energy?

**Refrigeration:** During the contest week, how consistently do the refrigerator and freezer maintain interior temperatures while minimizing energy use?

**Hot Water:** Can the house supply all the energy necessary to heat water for bathing, laundry, and dishwashing?

**Energy Balance:** How well have the teams used only the sun's energy to perform all of the tasks of the competition?

**Lighting:** Is the lighting of the house elegant, of high quality, and energy efficient, both day and night?

**Home Business:** Does the house produce enough power to satisfy the energy needs of a small home business?

**Getting Around:** Does the house generate enough "extra" energy to transport solar decathletes around town in a street-legal, commercially available electric vehicle?

# Why a Solar Decathlon?

With daily headlines about energy issues, U.S. consumers and policymakers are thinking a lot about energy these days. With the nation's energy security and future in mind, DOE developed the Solar Decathlon. Other sponsors include DOE's National Renewable Energy Laboratory and partners BP Solar, The Home Depot, EDS, and the American Institute of Architects.

## For the Spectators

The competition will serve as a living demonstration laboratory, where concept meets reality. As you watch the competition and tour exhibits you'll learn to think like a solar decathlete. You'll also learn strategies for reducing your energy consumption and lowering your utility bill. After all, the solar decathletes will perform the same kinds of daily activities we all do—cooking, washing, running errands, and using a computer to surf the Internet, read email, and write and print documents.

During the competition, you may see the decathletes use some competitive strategies that you wouldn't use in your own home. Everyday life isn't a Solar Decathlon. But no matter what you think about energy—or even if you don't think about it at all—you can learn something from the Solar Decathlon.

## **Come See How Solar Works!**

Solar energy and energy efficiency technologies have come a long way since the 1970s when many new solar products were introduced to the market. Solar panels are many times more efficient and reliable today, and energy-efficient appliances and lighting can save you money.

To update your understanding of energy, join us for the Solar Decathlon. What you take away is up to you, but one thing will be clear—renewable energy is here to stay.

Visit the Solar Decathlon online and follow the teams' progress at:

# www.solardecathlon.org

Learn more about solar energy and energy efficiency at:

www.eren.doe.gov

#### **Schedule of Events**

The Solar Village will be open September 26 – October 6, 9 a.m. – 5 p.m. daily. Visitors can tour village exhibits and learn about energy efficiency and solar energy from the Solar Decathlon teams.

#### September 19 - 25

Solar Village Construction

#### September 23

A team of communications professionals will begin to evaluate the teams' Web sites as well as newsletters and house tours offered during the competition.

#### September 26

10 a.m. Opening Ceremonies

## September 27 - 30

A jury of distinguished architects and a panel of professional engineers will evaluate the architectural design, aesthetics, innovation, and consumer appeal aspects of several contests.

### September 28 - 29

9 a.m. – 5 p.m. As part of the competition, teams will provide guided tours of their houses to the visiting public.

#### September 29 - October 5

Teams will use electric vehicles powered by their homes' solar electric systems to run daily errands.

## September 30 - October 4

Teams will be required to perform a variety of daily tasks that require energy use. Tasks include: cooking, laundry, washing dishes, bathing, operating a television and computer, and producing and printing documents. These tasks will be used to evaluate the energy efficiency and energy production of each house.

#### **October 5**

Noon, Closing Ceremonies

#### October 5 - 6

 $9\ a.m.-5\ p.m.$  Teams will provide guided tours of their houses to the visiting public.

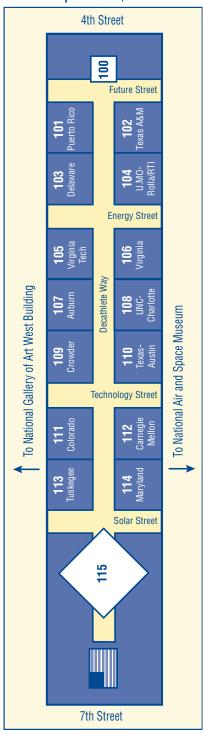
#### October 7 - 9

Disassembly of the Solar Village

# Learn more about solar energy!

Let the Solar Decathletes give you a guided tour of their houses:

September 28 – 29, 9 a.m. to 5 p.m. October 5 – 6, 9 a.m. to 5 p.m.



Produced for the U.S. Department of Energy by the National Renewable Energy Laboratory (NREL), a DOE national laboratory DOE/G0-102002-1621 • September 2002

Printed with a renewable-source ink on paper containing at least 50% wastepaper, including 20% postconsumer waste